I CLAIM;

1. An apparatus for separating individual containers from a plurality of containers frangibly joined together in a planar packet which comprises:

a vertically positioned chute assembly having a plurality of operational stations sequentially arranged in descending order from top to bottom;

said chute assembly having a width slightly larger than the width of a packet to be separated into individual containers;

a first chute operational station having an inclined input ramp for receiving a packet and directing it into an alignment station within said vertical chute;

a horizontally movable platen member forming one vertical wall of said alignment station and with said chute assembly a chamber to hold the packet to be separated;

first power means for selectively moving said platen member into contact with the packet to be separated and position it in proper alignment in said alignment station;

a container separating assembly mounted adjacent the lower end of said alignment station and extending across the width of said chute assembly;

a plurality of vertical partitions spaced apart transversely across said separating assembly so as to permit the passage there between of individual containers;

a vertically movable ram member mounted at the top of said alignment station having a width and thickness substantially equal to that of the packet to be separated and adapted to move vertically downwardly into said alignment station;

second power means for selectively moving said ram member to push the packet to be separated positioned in said alignment station through said plurality of vertical partitions in said container separating assembly;

a first holding and guiding station position below said separating assembly having a plurality of vertical channels at least equal to the number of individual containers in the plackets to be separated;

at least one horizontally movable gate member forming the bottom of said first holding station;

third power means for selectively moving said gate member out of the bottom of said first holding station to allow passage there through of separated containers;

a second holding and guiding station positioned below said first holding station having an equal number of vertical channels formed in alignment with the channels in said first holding station;

a plurality of individual horizontally movable gate members positioned one each to form the bottom of said second holding station vertical channels;

fourth power means for selectively moving said plurality of individual gate members out from the bottom of said channels to allow individual containers to pass there through;

a funnel shaped guiding station formed below said second holding and guiding station having a width at the top equal to the width of said second holding and guiding

station and a bottom width greater than an individual container; and

control program means for selectively actuating said first through fourth power means to sequentially operate the stations of said chute assembly to separate the packet of containers into individual containers.

2. The apparatus as claimed in claim 1 wherein said first through fourth power means are solenoid operated piston rods with said fourth power means piston rods forming said gate members and said first and second and third power means piston rods being attached to said platen, gate and ram members respectively.

3. The apparatus as claimed in claim 1 wherein said planar packet comprises six small elongated vials joined together with small frangible web tabs at spaced intervals along the length thereof.

4. The apparatus as claimed in claim 1 wherein said separating assembly and said first and second holding stations have operating spaces for six individual containers.

5. The apparatus as claimed in claim 1 wherein said vertical partitions of said separating assembly have a vertical height substantially equal to the vertical height of said assembly.

6. The apparatus as claimed in claim 1 wherein said vertical partitions of said separating assembly comprise a plurality of spaced apart wires extending substantially horizontally across said separating assembly from front to back.

7. The apparatus as claimed in claim 4 wherein said planar packet comprises less than six small elongated vials frangiblly joined together.

8. The apparatus as claimed in claim 2 wherein said at least one horizontal movable gate member comprises at least two sections for allowing passage of less than all of the separated individual containers at one time.

9. The apparatus as claimed im claim 6 wherein said control program means includes a computer program to sequentially actuate said power means so as to maximize the throughput of individual separated containers.

10. The apparatus as claimed in claim 7 wherein while said control program causes said ram member to place all the separated individual containers from a packet into said first holding station, and then releases approximately one half of the separated individual containers from said first holding station into said second holding station and while said second holding station is releasing said approximately one half of the separated individual containers held therein to said funnel station, said first holding station releases the rest of said packet individual containers into said second holding station allowing said ram member to start another cycle.

11 The apparatus as claimed in claim 1 wherein said first chute station, separating assembly and said first holding station comprise a quick release removable subassembly whereby different size and shape containers may be accommodated by interchanging subassemblies.

12. The apparatus as claimed in claim 1 wherein said vertically movable ram member includes a plurality of fingers formed across the bottom edge thereof ; and
said fingers having a length equal to the height of said separating assembly and a width less than the distance between said vertical partitions.

13. A method for separating individual containers from a plurality of containers frangibly joined together in a planar packet which comprises:
causing a packet to be separated to fall by gravity into a chamber in a vertical position with the individual containers lying side by side in vertical alignment;
positioning a plurality of vertical partition members spaced apart at intervals equal to the size of the individual containers below the vertically positioned packet;
moving said packet through said plurality of vertical partition members to separate said packet into individual containers;
holding said separated individual containers in a plurality of vertical channels positioned below said vertical partition members; and
releasing said separated individual containers, one at a time, to fall into a hopper for further processing.

14. The method as claimed in claim 13 further including:

holding said separated individual containers in a first plurality of channels;

releasing a first portion of said separated containers into a second plurality of vertical oriented channels;

releasing said first portion of individual containers one at a time into a hopper for further processing until all have been released;

releasing the remaining portion of separated containers in said first plurality of channels into said second plurality of vertical channels; and

releasing said remaining portion of separated containers one at a time into a hopper for further processing until all separated containers have been released.

15. The method as claimed in claim 14 further including:

programing the releasing of portions of separated containers and the releasing of individual containers with the movement of packets through said vertical partition members to maximize the output of individual separated containers.